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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,293	03/25/2005	Manfred Hubinger	HUBINGER, M. ET AL 1 PCT	4663
25889 7590 02/13/2007 WILLIAM COLLARD COLLARD & ROE, P.C. 1077 NORTHERN BOULEVARD ROSLYN, NY 11576			EXAMINER KERN, KEVIN P	
			ART UNIT	PAPER NUMBER
			1725	
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/13/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/529,293

Applicant(s)

HUBINGER ET AL.

Examiner

Kevin P. Kerns

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 February 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-25 is/are rejected.
- 7) ☒ Claim(s) 16 and 20 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 25 March 2005 and 01 February 2007 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>2/1/07</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: on page 3, 9th line from the end, as well as on page 4, 1st line (of the specification amendments of February 1, 2007), replace "20" with "10" after "torch" in both instances (also see section 7 of the prior Office Action). Appropriate correction is required.

Claim Objections

2. Claims 16 and 20 are objected to because of the following informalities: in claim 16, lines 2-4, it is believed that all four instances of reference numbers should be deleted, as the applicants have deleted all reference numbers in the remaining claims. In claim 20, 2nd line, replace "14" with "25", as claim 14 was cancelled. Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 15-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 25 (5th line), the phrase "being designed to be" is indefinite, as it broadly recites an optional function of being "connected". It is suggested to replace "being designed to be" with "being" to more distinctly define this limitation.

With regard to claim 25 (3rd and 4th lines from the end of the claim), both instances of the phrase "will be" are indefinite, as "will be" broadly recites optional functions of being "activated or deactivated" and "transmitted". It is suggested to replace "will be" with "is" in both instances to more distinctly define these limitations.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 15-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 8-90481 in view of GB 2 118 524.

JP 8-90481 discloses an external contact detecting device, including a switch-off (shut-off) box (Figure 4b) for a welding torch 4 (Figure 1) mounted on a robot system (Figure 2), in which the switch-off box (see abstract and the international search report, which cites JP 8-90481 as the closest prior art) comprises coupling means (3,5,7,9,10) mounted on a bearing plate 6 in a housing 2 of a body of the welding torch 4, such that coupling means (3,5,7,9,10) are connected to the torch body connected to a hose pack 23 (Figure 3); two oppositely arranged openings in the housing, such that the housing is comprised of a projection on one side and at least two parts (including an insulating external ring in the intermediate portion of the housing) attached by coupling means in the form of bolts and including a top bearing surface (supporting surface) of the tool side housing 3 (Figure 4a) to couple the housing parts to each other and the torch body and the hose pack, with the supporting surface of tool side housing 3 providing both punctual contact with the housing and connection to the contacting/switching elements, in the form of switch 11 of Figures 1, 3, and 4 (abstract; paragraphs [0002]-[0010] of Japanese text; and Figures 1-4). JP 8-90481 does not specifically disclose that the supporting surface, when lifted from the housing, is operable to activate and/or deactivate the contacting/switching element, and thus transmit a signal from the contacting/switching element to an interfaced control device or the robot system.

However, GB 2 118 524 discloses an industrial robot that includes a welding torch, in which the welding torch 24 is supported to be free from positional deviations

during operations of the robot R while being capable of being tilted and slidably moved with respect to a movable unit of the robot R, such that a supporting surface of the coupling means is operable to be lifted from a portion of the housing (cap member 15) via spring presser 14, sleeve 18, compression spring 20, and flexible guide 21, to provide detection of welding position by a single detector 25 in the spring presser 14, and thus activate and/or deactivate the contacting/switching element, resulting in transmission of a signal (and a potential abnormal state) from the contacting/switching element to an interfaced control device on the robot system, in which these features are advantageous for providing the welding torch with the capability of being freely displaced in acting directions of external forces without a possibility of damages to various parts and components (abstract; page 1, lines 5-11 and 109-130; page 2, lines 1-42 and 80-130; page 3, lines 1-130; page 4, lines 1-47; and Figures 3-10).

It would have been obvious to one of ordinary skill in the art at the time the applicants' invention was made to modify the external contact detecting device, including a switch-off (shut-off) box for a welding torch mounted on a robot system, as disclosed by JP 8-90481, by using the industrial robot that includes a welding torch that includes the supporting surface operable to activate and/or deactivate the contacting/switching element, and thus transmit a signal from the contacting/switching element to an interfaced control device or the robot system, as taught by GB 2 118 524, in order to provide the welding torch with the capability of being freely displaced in acting directions of external forces without a possibility of damages to various parts and components (GB 2 118 524; abstract; page 1, lines 109-126; and page 2, lines 30-42).

Response to Arguments

8. The examiner acknowledges the applicants' amendment, replacement drawing sheets, and an Information Disclosure Statement, all of which were received by the USPTO on February 1, 2007. The replacement drawing sheets overcome prior objections to the drawings. In addition, the amendments overcome prior objections to the abstract and specification (except a minor specification objection in above section 1), as well as all except two of the 35 USC 112, 2nd paragraph rejections (see above section 4). However, new claim objections have been raised due to the amendments to claims 16 and 20 (see above section 2). It is also noted that the Information Disclosure Statement of February 1, 2007 (previously requested as being a missing attachment to the IDS of July 13, 2005), is actually a duplicate of the previously considered IDS of March 25, 2005. As a result, the IDS dated February 1, 2007 is included with this Office Action, despite that it includes "marked-through" (previously considered) references. The applicants have cancelled independent claim 14, while adding new independent claim 25. Claims 15-25 are currently under consideration in the application.

9. Applicants' arguments filed February 1, 2007 have been fully considered but they are not persuasive.

With regard to the applicants' remarks/arguments on pages 13-15 of the amendment, it is first noted (on page 13) that the applicants have not addressed two 35 USC 112, 2nd paragraph rejections in above section 4 (also see section 9 of the prior

Office Action), and corrections/clarifications are requested in the next communication. Regarding the 35 USC 103(a) rejections, the applicants have addressed their invention in the paragraph bridging pages 14 and 15. However, in their arguments against JP 8-90481 in the paragraph bridging paragraphs 13 and 14, as well as the 1st full paragraph on page 14, the applicants have not directly stated what claim limitation(s) that JP 8-90481 allegedly do not teach, but instead have only provided several operational disadvantages as follows: "not an independent device but rather an integration of the welding torch", "not easy to flexibly use the switch-off device...", "not configured in a simple manner", "indirectly activates a switch...adversely affecting the switch-off behavior", and "difficult to mount and demount the welding torch, and further can be hindering when manipulating the robot system". Even if all five alleged disadvantages were true, none of them are directly applicable to independent claim 25 (see next paragraph). On page 15, the applicants state, "The second document cited, GB 2 118 524 A, shows a similar construction to that of JP 8-90481 A, with the same disadvantages and differences from the present invention.". Again, the applicants have not specified what claim limitation(s) are allegedly not taught by either or both references in combination. The examiner continues to set forth (in above section 7) that JP 8-90481 does not specifically disclose that the supporting surface, when lifted from the housing, is operable to activate and/or deactivate the contacting/switching element, and thus transmit a signal from the contacting/switching element to an interfaced control device or the robot system. However, GB 2 118 524 discloses these features, and including motivation to combine with JP 8-90481, namely in order to provide the welding

torch with the capability of being freely displaced in acting directions of external forces without a possibility of damages to various parts and components (see section 7).

In response to applicant's argument that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., "not an independent device but rather an integration of the welding torch", "not easy to flexibly use the switch-off device...", "not configured in a simple manner", "indirectly activates a switch...adversely affecting the switch-off behavior", and "difficult to mount and demount the welding torch, and further can be hindering when manipulating the robot system") are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

Conclusion

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

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the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dr. Kevin P. Kerns whose telephone number is (571) 272-1178. The examiner can normally be reached on Monday-Friday from 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan can be reached on (571) 272-1292. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Kevin P. Kerns *Kevin Kerns 2/9/07*
Primary Examiner
Art Unit 1725

KPK
kpk

February 9, 2007